

Thank you for using eradoc, a platform to publish electronic copies of the Rothamsted Documents. Your requested document has been scanned from original documents. If you find this document is not readable, or you suspect there are some problems, please let us know and we will correct that.



ROTHAMSTED  
RESEARCH

# Yields of the Field Experiments 1986

[Full Table of Content](#)



## 86/R/WW/4 Factors Affecting Take-all - W. Wheat

### Rothamsted Research

Rothamsted Research (1987) *86/R/WW/4 Factors Affecting Take-all - W. Wheat* ; Yields Of The Field Experiments 1986, pp 188 - 191 - DOI: <https://doi.org/10.23637/ERADOC-1-36>

86/R/WW/4

WINTER WHEAT

FACTORS AFFECTING TAKE-ALL

Object: To study the effects of a range of factors on the incidence of take-all and on the yield of w. wheat - Pastures.

Sponsors: D. Hornby, G.L. Bateman, R.J. Gutteridge.

Design: A half replicate of 2 x 2 x 2 x 2 x 2 x 2.

Whole plot dimensions: 3.0 x 10.0.

Treatments: Combinations of:-

1. SOWDATE                      Dates of sowing:  
    24 SEPT                      24 September, 1985  
    18 OCT                        18 October
2. SOILFUNG                    Application of fungicide to the seedbed:  
    NONE                         None  
    NUARIMOL                    Nuarimol at 1.0 kg
3. SEEDRESS                    Seed dressings:  
    ORGANO M                    Organo mercury  
    TRIADIME                    Triadimenol plus fuberidazole
4. AUTUMN N                    N application to the seedbed:  
    0                              None  
    60                             60 kg N as 'Nitro-Chalk' on 24 Sept, 1985
5. N TIME                        Spring application of 200 kg N/ha:  
    SINGLE                        Single application on 21 Apr, 1986  
    DIVIDED                      40 kg early, on 12 Mar, 160 kg later, on 21 Apr
6. N FORM                        Forms of spring nitrogen:  
    SUL AMM                      Sulphate of ammonia  
    AMM NITR                     Ammonium nitrate as 'Nitro-Chalk'

Basal applications: Manures: (0:18:36) at 690 kg. Weedkillers: Clopyralid at 0.07 kg, bromoxynil octanoate at 0.34 kg, mecoprop at 2.5 kg and isoproturon at 2.1 kg in 200 l applied with the prochloraz and carbendazim. Fungicides: Prochloraz at 0.40 kg and carbendazim at 0.15 kg. Propiconazole at 0.12 kg in 200 l.

Seed: Avalon, sown at 180 kg.

Cultivations, etc.: - Heavy spring-tine cultivated: 11 Sept, 1985 and 19 Sept. PK applied: 20 Sept. SOWDATE 24 SEPT plots rotary harrowed, seed sown: 24 Sept. SOWDATE 18 OCT plots rotary harrowed, seed sown: 18 Oct. Weedkillers with prochloraz and carbendazim applied: 30 Apr, 1986. Propiconazole applied: 27 June. Combine harvested: 21 Aug. Previous crops: W. wheat 1984 and 1985.

86/R/WW/4

NOTE: Plant samples were taken in mid-March, end of April and the beginning of July for assessment of take-all. Assessments for eyespot and sharp eyespot were made in July. Components of yield were measured.

GRAIN TONNES/HECTARE

\*\*\*\*\* TABLES OF MEANS \*\*\*\*\*

SOILFUNG	NONE	NUARIMOL	MEAN
SOWDATE			
24 SEPT	7.87	8.42	8.15
18 OCT	8.79	8.78	8.78
MEAN	8.33	8.60	8.47
SEEDRESS	ORGANO M	TRIADIME	MEAN
SOWDATE			
24 SEPT	8.12	8.17	8.15
18 OCT	8.90	8.66	8.78
MEAN	8.51	8.42	8.47
SEEDRESS	ORGANO M	TRIADIME	MEAN
SOILFUNG			
NONE	8.36	8.30	8.33
NUARIMOL	8.66	8.54	8.60
MEAN	8.51	8.42	8.47
AUTUMN N	0	60	MEAN
SOWDATE			
24 SEPT	8.13	8.16	8.15
18 OCT	8.65	8.91	8.78
MEAN	8.39	8.54	8.47
AUTUMN N	0	60	MEAN
SOILFUNG			
NONE	8.22	8.44	8.33
NUARIMOL	8.57	8.64	8.60
MEAN	8.39	8.54	8.47
AUTUMN N	0	60	MEAN
SEEDRESS			
ORGANO M	8.34	8.69	8.51
TRIADIME	8.45	8.39	8.42
MEAN	8.39	8.54	8.47
N TIME	SINGLE	DIVIDED	MEAN
SOWDATE			
24 SEPT	7.85	8.45	8.15
18 OCT	8.64	8.93	8.78
MEAN	8.24	8.69	8.47

86/R/WW/4

GRAIN TONNES/HECTARE

\*\*\*\*\* TABLES OF MEANS \*\*\*\*\*

N TIME	SINGLE	DIVIDED	MEAN
SOILFUNG			
NONE	7.96	8.71	8.33
NUARIMOL	8.53	8.67	8.60
MEAN	8.24	8.69	8.47
N TIME	SINGLE	DIVIDED	MEAN
SEEDRESS			
ORGANO M	8.34	8.68	8.51
TRIADIME	8.14	8.70	8.42
MEAN	8.24	8.69	8.47
N TIME	SINGLE	DIVIDED	MEAN
AUTUMN N			
0	8.27	8.52	8.39
60	8.22	8.86	8.54
MEAN	8.24	8.69	8.47
N FORM	SUL AMM	AMM NITR	MEAN
SOWDATE			
24 SEPT	8.28	8.02	8.15
18 OCT	8.64	8.93	8.78
MEAN	8.46	8.47	8.47
N FORM	SUL AMM	AMM NITR	MEAN
SOILFUNG			
NONE	8.35	8.31	8.33
NUARIMOL	8.56	8.64	8.60
MEAN	8.46	8.47	8.47
N FORM	SUL AMM	AMM NITR	MEAN
SEEDRESS			
ORGANO M	8.64	8.39	8.51
TRIADIME	8.28	8.56	8.42
MEAN	8.46	8.47	8.47
N FORM	SUL AMM	AMM NITR	MEAN
AUTUMN N			
0	8.60	8.19	8.39
60	8.32	8.75	8.54
MEAN	8.46	8.47	8.47
N FORM	SUL AMM	AMM NITR	MEAN
N TIME			
SINGLE	8.20	8.28	8.24
DIVIDED	8.72	8.66	8.69
MEAN	8.46	8.47	8.47

86/R/WW/4

\*\*\*\*\* STANDARD ERRORS OF DIFFERENCES OF MEANS \*\*\*\*\*

MARGINS OF TWO FACTOR TABLES	0.275
TWO FACTOR TABLES	0.389

\*\*\*\*\* STRATUM STANDARD ERRORS AND COEFFICIENTS OF VARIATION \*\*\*\*\*

STRATUM	DF	SE	CV%
WP	10	0.777	9.2

GRAIN MEAN DM% 80.2

PLOT AREA HARVESTED 0.00272